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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,144	03/11/2004	Hideyuki Kaneko	1188-0118P	7454
2292 7590 07/16/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER MULLIS, JEFFREY C	
			ART UNIT 1711	PAPER NUMBER
			NOTIFICATION DATE 07/16/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary**

Application No.

10/797,144

Applicant(s)

KANEKO ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,5 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by or in the alternative obvious over Janssen et al. (EP 0856542, cited by applicants).

Patentees disclose a star shaped polymer having polyolefin arms coupled via an agent having ester and amine functionality having less than 200 atoms. See for instance the reaction shown at the top of pages 16 or 20. The term "derived from" is a process limitation and as such applicants claim 4 is in product by process form. Note page 13 for use of ester linking group such as would result in an acyl residue in the portion of the linking group present in the polymer product as would also result from reaction of an anhydride rather than ester functionality.

Product-by-process claims are not rejected using the approach set out in Graham v. Deere. It is applicant's burden to show that there is a non-obvious difference

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between the product of a product-by-process claim and a prior art product which reasonably appears to be the same or only slightly different whether or not the prior art product is produced in the same manner as the claimed product. Note In re Marosi, 218 USPQ 289, 292-293 (CAFC 1983); In re Brown, 173 USPQ 685 (CCPA 1972) and In re Thorpe, 227 USPQ 964 (CAFC 1985) in this regard.

Claims 3, 5 and 8-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over over Katayama et al. (JP 1972-18656).

Patentees disclose a process in which an olefin such as ethylene or propylene is polymerized (first complete paragraph on page 2 of the translation) to produce a halogen terminated polymer and transformed into an amine terminated polymer (second and third complete paragraphs on page 3) following which lactones or ethylene oxide is reacted with the amino functionality to produce a polyester or polyether block (second complete paragraph on page 4). Note structure "G" on page 4 having one "P" chain (which may be derive from polyolefin) and two polyether chains. Thus a polymer containing a polyolefin chain and two polyester or polyether chains attached via a nitrogen radical may be produced. As the first ethylene oxide unit or lactone unit to add to the amino function contains a nitrogen carbon bond it is unlike the units contained in the polyether or polyester chains and thus is most properly viewed as part of the linking

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group along with the nitrogen atom derived from the amino group and thus applicants polymer containing an ether or ester linking group is present. While there are no specific examples using ethylene or propylene, the first two examples use styrene instead which is a monomer with an olefinic unsaturation and polystyrene can therefore be construed as a polyolefin. While examples 1 and 2 do not explicitly recite that one polystyrene chain and two polylactone chains are present excess amine is used which would favor production of monopolystyrene amine and there is nothing to prevent reaction of lactone with the initially produced secondary amine attached to a polylactone chain and a polystyrene chain. In any case structure "G" referred to above clearly suggests applicants materials given that "P" is disclosed to be derivable from olefins.

Product-by-process claims are not rejected using the approach set out in Graham v. Deere. It is applicant's burden to show that there is a non-obvious difference between the product of a product-by-process claim and a prior art product which reasonably appears to be the same or only slightly different whether or not the prior art product is produced in the same manner as the claimed product. Note In re Marosi, 218 USPQ 289, 292-293 (CAFC 1983); In re Brown, 173 USPQ 685 (CCPA 1972) and In re Thorpe, 227 USPQ 964 (CAFC 1985) in this regard.

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Applicant's arguments filed 5-2-07 have been fully considered but they are not persuasive.

Applicants may contact the examiner to set up a time for an interview if they still wish an interview after reviewing the above Office action.

As set out above it reasonably appears that Jenssens embodiments using ester linking compounds are the same as those in the instant claims 4,5 and 8-11.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Mullis whose telephone number is 571 272 1075. The examiner can normally be reached on Mon-Friday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seidleck James, can be reached on M-F. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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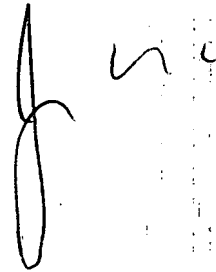
you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey C. Mullis  
J Mullis  
Art Unit 1711

JCM

7-7-7

Jeffrey Mullis  
Primary Examiner  
Art Unit 1711

A handwritten signature in black ink, appearing to be 'J. Mullis', written over the printed name and title.